

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/771,333	02/05/2004	Yin-Chun Huang	4425-346	3934	
7590 02/09/2005			EXAMINER		
LOWE HAUPTMAN GILMAN & BERNER, LLP			SUN, X	SUN, XIUQIN	
1700 Diagonal Road, Suite 310 Alexandria, VA 22314			ART UNIT	PAPER NUMBER	
Alexandria, V	1 22314		2863		
			DATE MAILED: 02/09/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Antion Commence	10/771,333	HUANG ET AL.				
Office Action Summary	Examiner	Art Unit				
	Xiuqin Sun	2863				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on <u>05 February 2004</u> .						
2a) This action is FINAL . 2b) ⊠ This	This action is FINAL . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-22 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-7 and 16-22</u> is/are rejected.						
7)⊠ Claim(s) <u>8 -15</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examine	۲.					
10)⊠ The drawing(s) filed on <u>05 February 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) Other:						

Application/Control Number: 10/771,333

Art Unit: 2863

DETAILED ACTION

Claim Objection

1. Claims 1, 2, 4, 6, 7, 8, 12, 16 and 18 are objected to because of the following minor informalities:

Claims 1, 4, 8, 12, 16 and 18, change "a analogy" to --an analogy--.

Claim 1 recites the limitation "the amplifier circuit". There is insufficient antecedent basis for this limitation in the claim.

Claims 6 and 8, change "a average" to --an average--.

Claims 2, 8 and 16 recite the limitation "the test strip". There is insufficient antecedent basis for this limitation in the claims.

Claims 6 and 7 recite the limitation "the plurality of". There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2863

3. Claims 1-5 and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawanaka et al. (U.S. Pub. No. 20030150724) in view of Ueno et al. (U.S. Pub. No. 20020133064).

Kawanaka et al. teach a method for determining the resolution of blood glucose, comprises: an analogy signal source from the blood glucose solution being transferred into the amplifier circuit which comprising a resistance, a referenced resistance and a referenced voltage (Figs. 1 and 16; and sections 0092-0094); transforming said analogy signal source to be a digital signal (Figs. 1 and 16; and sections 0092-0094); treating said digital signal (Figs. 1 and 16; and sections 0092-0094). The teaching of Kawanaka et al. further includes: said analogy signal source coming from a chemical reaction caused by placing the blood glucose solution reacts on the test strip having catalyst (sections 0002 and 0003); said chemical reaction comprising an oxidation reduction reaction (sections 0005, 0006, and 0104); said transforming said analogy signal source comprising transferring said analogy signal source through an analogy front end (Figs. 1 and 16). The teaching of Kawanaka et al. further includes the step of making a mapping table of said peak value and a outputted voltage (sections 0092-0094).

Kawanaka et al. do not mention explicitly: transferring out said digital signal with a rising curve which would get a peak value of said rising curve; and calculating said resolution of blood glucose according to said resistance, said referenced resistance, said referenced voltage and said peak value. Kawanaka et al. also do not mention: said peak value being the difference between the first time (t1) and the initial time (to) and said difference being larger than zero.

Application/Control Number: 10/771,333 Page 4

Art Unit: 2863

Ueno et al. teach a method and system for determining blood sugar level (Figs. 2 and 18), including the steps of: transferring out said digital signal with a rising curve which would get a peak value of said rising curve (Fig. 6; and sections 0063 and 0064); and calculating a concentration of blood glucose according to a resistance, a referenced resistance, and a referenced voltage that are input into an amplifier, and said peak value (Fig. 6; and sections 0063 and 0064). The teaching of Ueno et al. further includes: said peak value being the difference between the first time (t1) and the initial time (to) and said difference being larger than zero (Fig. 6; and sections 0063 and 0064);

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Ueno et al. in the invention of Kawanaka et al. in order to implement a more precise blood glucose concentration measuring device having higher measurement accuracy (Ueno et al., sections 0011 and 0064).

Allowable Subject Matter

4. Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 8-15 are allowed.

Reasons for Allowance

5. The following is an examiner's statement of reasons for allowance:

Art Unit: 2863

The primary reason for the allowance of claim 6 is the inclusion of the limitation an average peak value calculating the plurality of said peak value after a pre-setting sampling time. It is this limitation found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

The primary reason for the allowance of claim 7 is the inclusion of the limitation a mapping table of said outputted voltage and said plurality of peak value from the plurality of said rising curves. It is this limitation found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

The primary reason for the allowance of claims 8-15 is the inclusion of the method steps of: calculating an average peak value on a peak point of said rising curve after a pre-setting sampling time; and calculating said resolution of blood glucose according to said average peak value. It is these steps found in each of the claims, as they are claimed in the combination that have not been found, taught or suggested by the prior art of record, which make these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

Contact Information

Application/Control Number: 10/771,333

Art Unit: 2863

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Xiugin Sun whose telephone number is (571)272-2280.

The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Barlow can be reached on (571)272-2269. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Xiuqin Sun Examiner

Art Unit 2863

XS

February 2, 2005

Page 6

Technology Center 2800